

<b>Examiner-Initiated Interview Summary</b>	<b>Application No.</b> 10/660,167	<b>Applicant(s)</b> DAY ET AL.	
	<b>Examiner</b> Michael D. Pham	<b>Art Unit</b> 2167	

**All Participants:**

(1) Michael D. Pham.

(2) \_\_\_\_\_

**Status of Application: Pending**

(3) Scott A. Stinebruner (reg. 38,323).

(4) \_\_\_\_\_

**Date of Interview:** 30 October 2007

**Time:** 2:30pm

**Type of Interview:**

- ☒ Telephonic  
☐ Video Conference  
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

**Exhibit Shown or Demonstrated:** ☐ Yes ☐ No

If Yes, provide a brief description:

**Part I.**

Rejection(s) discussed:

Claims discussed:

*Claim 7*

Prior art documents discussed:

**Part II.**
**SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:**

*Examiner proposed amendments to improve clarity of the claim. Applicant's representative agreed to allow an Examiner's amendment to be done.*

**Part III.**

- ☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.  
☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

  
(Examiner/SPE Signature)

\_\_\_\_\_  
(Applicant/Applicant's Representative Signature – if appropriate)

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\*\*\* TX REPORT \*\*\*  
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## Fax Cover Sheet

Date: 29 Oct 2007

To: Scott A. Stinebruner (reg. 38, 323)	From: Michael D. Pham
Application/Control Number: 10/660,167	Art Unit: 2167
Fax No.: 513-241-6234	Phone No.: (571)272-3924
Voice No.: 513-241-2324	Return Fax No.: (571) 273-3924
Re:	CC:
<input type="checkbox"/> Urgent <input checked="" type="checkbox"/> For Review <input type="checkbox"/> For Comment <input type="checkbox"/> For Reply <input type="checkbox"/> Per Your Request	

## Comments:

Attached are proposed amendments to improve clarity of the claims and to put the case into condition for allowance. Please let me know by Wednesday, October 31, 2007 if the amendments are accepted, so that an examiner's amendment may be done.



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<b>Re:</b>	<b>CC:</b>

☐ **Urgent**    ☒ **For Review**    ☐ **For Comment**    ☐ **For Reply**    ☐ **Per Your Request**

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**Number of pages 4 including this page**

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**Proposed Amendment**

**Claim 7:**

A computer-implemented method for executing a query that evaluates one or more records of a table according to predetermined selection criteria, comprising the steps of:

optimizing a query plan for the query by labeling the query as a candidate query for dynamic bitmap updating,

where the optimizing a query plan for the query by labeling the query as a candidate query for dynamic bitmap updating further comprises before initializing the bitmap and starting a first primary task and a second background task, determining if the query is labeled as a candidate for dynamic bitmap updating;

when the query is labeled as a candidate query for dynamic bitmap updating then executing the steps of:

initializing a bitmap having a plurality of elements, each element of the bitmap corresponding to a record of the table, and each element initialized to an active value;

running the first primary task that individually retrieves each of the one or more records from storage according to whether the corresponding element of the bitmap has an active value;

running, concurrently with the first primary task, a second background task that executes the same query as the first task and that updates the bitmap by setting [[to]] an inactive value to the [[respective]] element of the bitmap corresponding to any record that does not satisfy at least a portion of the selection criteria, wherein running the second task includes:

scanning a column of the table using an index built over the column, the portion of the selection criteria relating to record values within the column;

determining a set of records whose record values within the column do not satisfy the portion of the selection criteria; and

concurrently with the first task individually retrieving records from storage having corresponding bitmap element to an inactive value for each record within the set of records; and

continuing to run the first task until all records from the table, having a corresponding active-value bitmap element, have been retrieved from storage, including accessing the bitmap in the first task before at least one element is set to an inactive value by the second task to determine whether to retrieve a record from storage[[:]].

[[optimizing a query plan for the query by labeling the query as a candidate for dynamic bitmap updating; and

before initializing the bitmap and starting the first task and second task, determining if the query is labeled as a candidate for dynamic bitmap updating.]]

**Claim 8:**

The method according to claim 7, wherein the step of running the first task includes the steps of:

determining if a retrieved record satisfies the selection criteria; and

returning, as part of a query result set, the retrieved record if the selection criteria is satisfied.

**Claim 10**

The method according to claim 7, wherein the step of running the first task includes the steps of:

discarding any record having a corresponding bitmap element which has an inactive value, by not retrieving that record from storage.

**Claim 13**

The method according to claim 9, wherein a first order in which the one or more records is retrieved differs from a second order in which the column of the table is scanned.

**Claim 14**

The method according to claim 7, further comprising the steps of:

collecting statistics relating to performance of executing the query; and  
generating a recommendation presented to a user for creating a permanent index based on the statistics.